



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/816,009

03/31/2004

Himanshu Pokharna

042390.P17631

9563

8791

7590

10/27/2006

BLAKELY SOKOLOFF TAYLOR & ZAFMAN  
12400 WILSHIRE BOULEVARD  
SEVENTH FLOOR  
LOS ANGELES, CA 90025-1030

EXAMINER

DOERRLER, WILLIAM CHARLES

ART UNIT

PAPER NUMBER

3744

DATE MAILED: 10/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/816,009	POKHARNA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	William C. Doerrler	3744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____                                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____   | 6) <input type="checkbox"/> Other: ____                           |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3,9,10,12 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Wall et al.

Wall et al show a refrigeration that cools chip 12 with evaporator 44. Condenser 70 represents a heat exchanger for disposing of the waste heat. It is noted that portable is a word of degree. Any system that can be moved by one person is seen as portable.

Claims 1-3,9,10,12 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Oh et al.

Oh et al a system for cooling chip 10 with an evaporator 31 which is powered by compressor 32. Waste heat is eliminated through air cooled condenser 33. It is noted that portable is a word of degree. Any system that can be moved by one person is seen as portable.

Claims 1-6 and 9-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Macias et al.

Macias et al show a CPU cooler 5 for a computer with an air cooled heat exchanger 39 with a fan 43 which cools a circulating fluid to cool the CPU. Controller 7 controls turning the components on including a Peltier refrigerator 33. The Peltier chip discards waste heat to external air passing through the external heat exchanger. It is noted that portable is a word of degree. Any system that can be moved by one person is seen as portable.

Claims 1-3,9,10,12 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Hsiao.

Hsiao shows a device by cooling an integrated circuit by using a thermoelectric device to cool the device and a fluid pump to pump heat transfer fluid through the heat exchanger. It is noted that portable is a word of degree. Any system that can be moved by one person is seen as portable.

Claims 1-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Ellsworth et al.

Ellsworth et al disclose a system with a refrigerant based cooling system (col. 5 line 59) which is used to cool a fluid which passes in thermal contact with the heat producing element of a computer. Controller 400 incrementally turns on the fan, pump and refrigeration system as described in column 5 line 59-column 6 line 33. It is noted that portable is a word of degree. Any system that can be moved by one person is seen as portable.

Claims 1-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Hood et al.

Art Unit: 3744

Hood et al disclose a passive cooling system for a computer which as needed activates a pump 47 (col. 6 lines 57-65), a fan 48 (col. 7 lines 23-31) and an active cooling system powered by compressor 14. Lines 58-67 of column 7 describes how the system starts in passive mode and activates powered components as needed. It is noted that portable is a word of degree. Any system that can be moved by one person is seen as portable.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over any one of Macias et al, Ellsworth et al, Hood et al, oh et al, or Wall et al in view of Fang.

Art Unit: 3744

Macias et al, Ellsworth et al, Hood et al, oh et al, and Wall et al each disclose applicants' basic inventive concept, a computer with an integral refrigeration system to provide cooling to the portable computer, substantially as claimed with the exception of a wireless antenna. Fang shows a portable computer with a wireless antenna to be old in the art. It would have been obvious to one of ordinary skill in the art at the time of applicants' invention from the teaching of Fang to modify the computer of any one of Macias et al, Ellsworth et al, Hood et al, oh et al, or Wall et al by adding an antenna to enable wireless connection between the computer and another device.

### ***Conclusion***


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hamman and DeVilbiss et al show refrigeration systems which control the flow of heat transfer fluid. McEuen et al show a docking station for a portable computer with a refrigeration system. Both Chrysler et al patents show refrigeration systems for electronic components. Chen, Lee et al and Homer et al show portable computers with integral antennas.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Doerrler whose telephone number is (571) 272-4807. The examiner can normally be reached on Monday-Friday 6:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on (571) 272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3744

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
William C Doerrler  
Primary Examiner  
Art Unit 3744

WCD